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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,180	03/31/2000	Sung-Hwa Gong	678-458 (P8993)	2621

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Paul J Farrell
Dilworth & Barrese
333 Earle Ovington Boulevard
Uniondale, NY 11553

EXAMINER

LELE, TANMAY S

ART UNIT	PAPER NUMBER
2684	75

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/540,180

Applicant(s)

GONG, SUNG-HWA

Examiner

Tanmay S Lele

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 17 May 2004 have been fully considered but they are not persuasive.
2. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding claims 40 – 43, Applicant attempts to overcome the rejection by stating, “Therefore, it is respectfully submitted that the present invention teaching a method for inputting digits or characters using the multi-function key is distinguishable from Mitchell disclosing the multifunction rocker switch for selecting a menu item and toggling a menu item's status (on/off),” and further that, “Accordingly, it is obvious that in a method according to Mitchell, digits and characters are input through a conventional main keypad.” Note that as stated in the previous Office Action (paper number 13, pages 3 –4), the combination of Mitchell in view of Seymour and Kunihiro were believed to teach the claimed as presented. More specifically, the Kunihiro reference was cited (as per page 4 of paper number 13) as curing these deficiencies, which Applicant attributes to not being taught by Mitchell. Hence, Examiner is not persuaded by Applicant's arguments that the references, when combined for the cited motivation, do not teach or recite the claimed as presented.
3. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the

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teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Applicant attempts to overcome the rejection by stating, "Furthermore, the switch in Mitchell does not consider the input of digits or characters at all. Accordingly, it is obvious that in a method according to Mitchell, digits and characters are input through a conventional main keypad. Therefore, it is respectfully submitted that there would be no motivation to combine Mitchell and Kunihiro." Examiner respectfully disagrees that there is no motivation to combine the cited references. Note that as stated in the previous Office Action, Mitchell teaches using the Smart Button to enable editing capabilities (Table 2, specifically column 7, lines 29 – 33) and further that the Smart Button can be used in entry of typed in AKEY (Table 2, specifically column 8, lines 58 – 59; note that Mitchell is silent as to how the alpha characters are entered here) and of using the Smart Button for completing an alpha entry (Table 2, specifically lines 48 – 49). Kunihiro teaches of using a single key that possess similar functionality and operational structure as Mitchell's key (Kunihiro: Figures 1B and 3 and column 3, lines 16 – 32 compared to Mitchell: Figure 3 and column 3, lines 7 – 12) that allows for entry of alphanumeric characters (Kunihiro: column 3, lines 59 – 63 for example) into a mobile communication device and further that this input device can be used in lieu of the key pad (column 1, lines 19 – 24 and column 5, lines 50 – 55). Continuing, all three references commonly included the teachings of miniaturization, compactness, or reduction of size with respect to a mobile communications devices (Mitchell: column 8, lines 61 – 65; Seymour: column 2, lines 10 –

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14 and column 1, lines 9 – 11; and Kunihiro: column 1, lines 19 – 24 and column 5, lines 50 – 55) and further make references to the removal of excess keys to potentially achieve such (Mitchell: column 8, lines 61 – 65; Seymour: Figure 1; and Kunihiro: column 1, lines 19 – 24 and column 5, lines 50 – 55). Thus it is reverently believed that due to the commonality of references, the cited motivations (as per paper number 13, pages 3 and 4) are plausible and in line with the scopes of the references when viewed as whole. Hence, Applicant's arguments do not persuade Examiner that there exists no motivation to combine the references and further that such a combination does not teach or recite the claimed as currently presented.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 40 – 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al. (Mitchell, US Patent 5,966,671) in view of Seymour (Seymour, US Patent No. 6,529,713) and in further view of Kunihiro et al. (Kunihiro, US Patent No. 5,915,228).

Regarding claim 40, Mitchell teaches of a method for using a multi-function key with a protrusion adapted to slide in a first direction and a second direction substantially opposite to the first direction, and be pressed in a third direction substantially perpendicular to the first direction (as seen in Figure 3 and column 3, lines 8 – 25), a display for displaying at least one of digits and characters, (as seen in Figure 2 and column 2, lines 55 – 65) and at least one hierarchal menu for selecting various functions (column 2, lines 18 – 30), comprising the steps of generating at least

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one input signal by performing at least one of the following multi function key manipulations: a) pressing the protrusion of the multi-function key at least once; b) sliding the protrusion of the multi-function key in the first direction; and c) sliding the protrusion of the multi-function key in the second direction (as seen in Figure 3 and starting column 2, line 66 and ending column 3, line 25 and column 2, lines 1 – 12).

Mitchell does not specifically teach of in a watch-type portable phone or the watch-type portable phone having the multi-function key (though it should be noted that Mitchell's invention deals with reduction of size of the mobile through the use of a smart button as detailed in, for example, starting column 1, line 66 and ending column 2, line 12) or of wherein the at least one input signal is used to input the at least digits and characters (though it should be noted that Mitchell does provide for provisions for editing via criteria, as seen in table 2, lines 29 –33).

In a related art dealing with the carrying of small mobile, Seymour teaches of a watch-type portable phone or the watch-type portable phone (column 1, lines 5 – 14 and Figures 1 – 6).

It would have been obvious to one skilled in the art at the time of invention to have included into Mitchell's multi-function smart button, Seymour's wearable wrist watch configuration, for the purposes of carrying the reduced size mobile and conveniently using the mobile in such a position, as taught by Seymour.

Mitchell in view of Seymour do not specifically teach of wherein the at least one input signal is used to input the at least digits and characters.

In a related art dealing with a method to input characters in a mobile using one input device, Kunihiro teaches of wherein the at least one input signal is used to input the at least digits

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and characters (abstract and starting column 2, line 64 and ending column 3, line 15 and column 4, lines 9 – 16).

It would have been obvious to one skilled in the art at the time of invention to have included into Mitchell and Seymour's wearable mobile with multifunction system, Kunihiro's inputting methods, for the purposes of realizing an input device which can manage with less mounting space, as taught by Kunihiro.

Regarding claim 41, Mitchell in view of Seymour and Kunihiro, teach all the claimed limitations recited in claim 40. Kunihiro further teaches of wherein a first inputting is performed if the manipulation is performed for a short duration (column 3, lines 41 – 50) and a second inputting is performed if the manipulation is performed for a long duration (column 3, lines 59 – 63).

Regarding claim 42, Mitchell in view of Seymour and Kunihiro, teach all the claimed limitations recited in claim 40. Mitchell further teaches of wherein the at least one input signal is further used to navigate through the at least one hierarchal menu (column 2, lines 18 – 30).

Regarding claim 43, Mitchell in view of Seymour and Kunihiro, teach all the claimed limitations recited in claim 40. Mitchell further teaches of wherein the at least one input signal is further used to select a function (column 2, lines 18 – 30).

Citation of Pertinent Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Inventor	Publication	Number	Disclosure
Hino et al.	US Patent	5,703,947	Portable telephone equipment for biasing a switching member to a normally neutral

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			position (specifically column 13, lines 25 –38)
Nishiyama et al.	US Patent	5,436,954	Foldable radio telephone set with rotary selector integral with foldable hinge element

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanmay S Lele whose telephone number is (703) 305-3462. The examiner can normally be reached on 9 - 6:30 PM Monday – Thursdays and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A. Maung can be reached on (703) 308-7745. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Tanmay S Lele
Examiner
Art Unit 2684

tsl
July 27, 2004


NAY MAUNG
SUPERVISORY PATENT EXAMINER